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JC840 U.S. PTO 07/31/00

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PTO/SB/05 (4/98)
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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No.	72189/98118B
First Inventor or Application Identifier	Stacy HAITSUKA, et al.
Title	Inactivity Timer for an Internet Client
Express Mail Label No.	EL389061602US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: **Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231**

1. [X] * Fee Transmittal Form *(e.g., PTO/SB/17)* *(Submit an original and a duplicate for fee processing)*
2. [X] Specification [*Total Pages* 49]
   (preferred arrangement set forth below)
   - Descriptive title of the Invention
   - Cross References to Related Applications
   - Statement Regarding Fed sponsored R & D
   - Reference to Microfiche Appendix
   - Background of the Invention
   - Brief Summary of the Invention
   - Brief Description of the Drawings *(if filed)*
   - Detailed Description
   - Claim(s)
   - Abstract of the Disclosure
3. [X] Drawing(s) *(35 U.S.C. 113)* [*Total Sheets* 7]
4. Oath or Declaration [*Total Pages* 4]
   a. [X] Newly executed (original or copy)
   b. [ ] Copy from a prior application (37 C.F.R. § 1.63(d)) *(for continuation/divisional with Box 16 completed)*
      i. [ ] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

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5. [ ] Microfiche Computer Program *(Appendix)*
6. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
   a. [ ] Computer Readable Copy
   b. [ ] Paper Copy (identical to computer copy)
   c. [ ] Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

7. [X] Assignment Papers (cover sheet & document(s))
8. [X] 37 C.F.R.§3.73(b) Statement *(when there is an assignee)* [X] Power of Attorney
9. [ ] English Translation Document *(if applicable)*
10. [ ] Information Disclosure Statement (IDS)/PTO-1449 [ ] Copies of IDS Citations
11. [ ] Preliminary Amendment
12. [X] Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
13. [X] * Small Entity Statement(s) *(PTO/SB/09-12)* [ ] Statement filed in prior application, Status still proper and desired
14. [ ] Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
15. [ ] Other: .....

16. **If a CONTINUING APPLICATION,** *check appropriate box, and supply the requisite information below and in a preliminary amendment:*
    [ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No: _____/_____
    Prior application information: *Examiner* _____ *Group / Art Unit:* _____
    For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS

[X] *Customer Number or Bar Code Label* 24196 *(Insert Customer No. or Attach bar code label here)* *or* [ ] *Correspondence address below*

Name	Steven C. Sereboff				
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Name (Print/Type)	Steven C. Sereboff	*Registration No. (Attorney/Agent)*	37,035
Signature		*Date*	7-31-00

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See 37 C.F.R. §§ 1.27 and 1.28.

TOTAL AMOUNT OF PAYMENT ($) 505.00

Complete if Known	
Application Number	
Filing Date	
First Named Inventor	Stacy HAITSUKA, et al.
Examiner Name	
Group / Art Unit	
Attorney Docket No.	72189/98118B

METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

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2. ☒ **Payment Enclosed:**
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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
101	690	201	345	Utility filing fee	345
106	310	206	155	Design filing fee	
107	480	207	240	Plant filing fee	
108	690	208	345	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) ($) 345.00

2. EXTRA CLAIM FEES

	Extra Claims		Fee from below	Fee Paid
Total Claims 29	-20** = 9	X	9	= 81
Independent Claims 4	- 3** = 1	X	39	= 39
Multiple Dependent			0	= 0

***or number previously paid, if greater; For Reissues, see below*

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
103	18	203	9	Claims in excess of 20
102	78	202	39	Independent claims in excess of 3
104	260	204	130	Multiple dependent claim, if not paid
109	78	209	39	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 120.00

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	380	216	190	Extension for reply within second month	
117	870	217	435	Extension for reply within third month	
118	1,360	218	680	Extension for reply within fourth month	
128	1,850	228	925	Extension for reply within fifth month	
119	300	219	150	Notice of Appeal	
120	300	220	150	Filing a brief in support of an appeal	
121	260	221	130	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,210	241	605	Petition to revive - unintentional	
142	1,210	242	605	Utility issue fee (or reissue)	
143	430	243	215	Design issue fee	
144	580	244	290	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	40
146	690	246	345	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	690	249	345	For each additional invention to be examined (37 CFR § 1.129(b))	

Other fee (specify) _____

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 40.00

SUBMITTED BY	Express Mail Label No.: EL389061602US			Complete (if applicable)	
Name (Print/Type)	Steven C. Sereboff	Registration No. (Attorney/Agent)	37,035	Telephone	(949) 252-3129
Signature				Date	7-31-00

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July 21, 2000

VIA EXPRESS MAIL / Label No. EL389061602US

BOX PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D.C. 20231

Re: U.S. Utility Patent Application for
INACTIVITY TIMER FOR AN INTERNET CLIENT
Inventors: Stacy Haitsuka, Marwan Zebian, Harold MacKenzie, Ronald Burr, Terry Warren, Shane Blaser and Colin Giffen
Assignee: NetZero, Inc.
Our Ref.: 72189/98118B

Dear Sir:

Enclosed herewith are the following documents related to the above identified invention:

	Document(s)	Pages/Sheets
1.	Specification, Claims, Abstract and Title Page	50
2.	Drawings (Figures 1 through 7)	7
3.	Declaration and Power of Attorney	4
4.	Statement Claiming Small Entity Status (47 CFR 1.9(f) & 1.27(c)) – Small Business Concern	1
5.	Fee Transmittal for FY2000, Utility Patent Application Transmittal; Patent Application Fee Determination Record	3
	Check in payment of filing fee of $465.00	1

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72189\98118A

	Document(s)	Pages/Sheets
6.	Assignment; Recordation Form Cover Sheet; Statement of Ownership	6
	Check in payment of recordation fee of $40.00	1
7.	A return receipt courtesy postcard	

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Enclosures

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Steven C. Sereboff
Typed or Printed Name of Person Signing Certificate

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Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE

STATEMENT CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN

Docket Number (Optional) 72189/98118B

Applicant, Patentee, or Identifier: Stacy Haitsuka, Ronald Burr, Harold MacKenzie, Marwan Zebian, Terry Warren, Shane Blaser
Application or Patent No.:
Filed or Issued:
Title: INACTIVITY TIMER FOR AN INTERNET CLIENT

I hereby state that I am
☐ the owner of the small business concern identified below:
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN NetZero Inc.

ADDRESS OF SMALL BUSINESS CONCERN 2555 Townsgate Road
Westlake Village, CA 91361-2650

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

☐ the specification filed herewith with title as listed above.
☐ the application identified above.
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:
☒ no such person, concern, or organization exists.
☐ each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING Stacy Haitsuka

TITLE OF PERSON IF OTHER THAN OWNER SVP ~~Chief~~ Technology ~~Officer~~

ADDRESS OF PERSON SIGNING 3835 E. Thousand Oaks Blvd. #338, Westlake Village, CA 91362

SIGNATURE _____ DATE 7-27-00

APPLICATION FOR
UNITED STATES PATENT
IN THE NAME OF

STACY HAITSUKA, MARWAN ZEBIAN,
HAROLD MacKENZIE, RONALD BURR,
TERRY WARREN & SHANE BLASER

ASSIGNORS TO

NetZero, Inc.

FOR

Inactivity Timer for an Internet Client

Prepared by Steven C. Sereboff, Esq.
& Fred C. Hernandez, Esq.
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DOCKET NO. 72189/98118B

Express Mail No. EL389061602US

INACTIVITY TIMER FOR AN INTERNET CLIENT

NOTICE OF COPYRIGHTS AND TRADE DRESS

RELATED APPLICATION INFORMATION

This application is related to the following applications, each of which is incorporated herein by reference:

(1) Application No. 09/324,747, entitled "Monitoring of Individual Internet Usage," filed June 3, 1999;

(2) Application No. 09/349,325, entitled "System and Device for Monitoring Individual Internet Usage," filed July 8, 1999;

(3) Application No. 09/364,544, entitled "Device for Displaying Advertisements to a User of an Online Service," filed July 29, 1999;

(4) Application No. 09/393,391, entitled "Internet Server with Dynamic Ad Targeting Capabilities," filed September 10, 1999;

(5) Application No. 09/348,411, entitled "Independent Internet Client Object with Ad Display Capabilities," filed July 7, 1999, which is incorporated herein by reference;

(6) Application No. 60/160,479, entitled "inactivity Timer for an Internet Client," filed October 19, 1999, from which priority is claimed; and

(7) Application No. 09/265,512 filed March 9, 1999 entitled "Network Data Distribution Based Upon User-Specific Qualities," which is a continuation-in-part of Application No. 60/077,331 filed March 9, 1998 entitled "Network Data Distribution Based Upon Geographic Location, Usage Patterns, Interactive Data, Profile Data, Demographic Data and Scheduling Information."

BACKGROUND OF THE INVENTION

1. Field Of The Invention

The present invention relates to display advertisements to a user of an online service.

2. Description Of Related Art

Online services today offer a variety of services to their users. Users may access news, weather, financial, sports, and entertainment services, participate in and retrieve information from online discussion groups, and send and receive email. A user of an online service typically accesses the service using specialized communication software (i.e., client application or client software) that establishes and manages a connection from the user's computer (or client) to the online service provider's host computers (or servers) and facilitates the user's interactions with the service.

In addition to managing the connection, there is provided software to display pages or screens relating to retrieved content according to views or presentations specific to the online service. This software may be integrated with the client application. The functionality of the content and the user interface (i.e., icons, dialog boxes, menus, etc.) for interacting with the content are typically dictated by various standards.

Interactions between the user's computer and the online service are facilitated by a variety of software protocols (i.e., communication conventions, rules and structures),

including application level protocols, for managing the transfer of data across the network and to the client application on the user's computer. A protocol may be proprietary or exclusive to an online service such that only client software from the online service provider may be used to communicate with the server software. For example, an online service provider that supports electronic mail, discussion groups, chat groups, news services, etc. may define and use specific protocols for each type of service so that appropriate information is exchanged between the participants (i.e., clients and servers). Each application-specific protocol may be based on a common, underlying protocol.

The Internet and World Wide Web ("Web"), comprised of a vast array of international computer networks, many provide online service users with considerable information resources and other content. Typically, this content is accessed using a web browser, such as Microsoft Internet Explorer or Netscape Navigator, capable of understanding the HyperText Markup Language (HTML) used to create the documents found on the Web and the HyperText Transfer Protocol (HTTP) used to navigate the Web. Email and Usenet discussion groups are typically accessed through companion software to the browser. Although web browsers typically have varying levels of functionality or sophistication, retrieved content is displayed in content pages according to views or presentations specific to the web document currently presented by the web browser. Typically, the views and presentations are different than those provided by the communication software from the online service provider because the web browser is,

in fact, a separate client application displaying web documents containing presentation directives.

When using a browser, the browser issues HTTP messages to request web pages. A requested web page is typically identified using its URL – uniform resource locator. The URL is a reference (or address) to a resource available on a TCP/IP network such as the Internet. A URL is composed of a character string, and may have a number of parts. These parts include a top level domain name, second level domain name, directory name, and file name. URLs may identify a file located on a web server. URLs may also point to other resources on the network such as database queries and command output. The determination and use of URLs is well known in the art and is not discussed further herein.

In some portions of this disclosure, the term "resource locator" is used. The term is defined as a string or code which uniquely identifies a resource on a network. Thus, the URL is a species of resource locator.

There are a number of types of online service providers. Online services may serve the general public or may serve a limited class of individuals. Some public OSPs utilize proprietary networks; America Online and @Home are examples. Other public OSPs use the public networks, and most Internet Service Providers (ISPs) are an example. OSPs often provide Internet access. Internet access is the primary service provided by some OSPs, most notably ISPs.

Users typically connect to an OSP using a computer with a communications device such as an analog modem, an Ethernet adapter, DSL adapter or cable modem. Such connections may be analog or digital, dial-up or constantly-connected. Subscribers typically pay a fee for their subscriptions to OSPs. These fees typically are in the form of a sign-up fee, plus online charges which are fixed (i.e., unlimited monthly access for a fixed fee) or based upon the amount of time the user is connected to the online service. The fees generally increase with bandwidth.

Some online service providers have derived revenue by displaying advertisements for third parties (hereinafter, "advertisements") to users. For example, when a user accesses a web page on the Web, an advertisement may be displayed to the user as part of the web page. Advertisements are also shown to users of some proprietary online services. Typically in such systems, each user accessing a certain screen or site is shown the same advertisement. Sophisticated systems have the capability to change the advertisement after a certain period of time.

Some attempts have been made to provide advertising-supported online services, including Internet access, on a free or heavily discounted basis. Typically, these online services required the user to use a special client application for connecting to the online service. The client application typically causes an advertising window to be displayed on the user's display. This advertising window remains visible and on top of other windows throughout the entire online session. The client application receives advertisements from the online service provider, and the client application displays the advertisements in the advertising window. It is unknown to the inventors, however,

whether the transmission of advertisements from the online service provider to the client application is initiated by the online service provider or the client application, how the online service determines which advertisements to send to the users, and whether such typical client applications do anything more than open the communications link with the online service and display advertisements.

In one advertising based Internet service called Bigger.net, the client application periodically requested new advertisements from an ad server. A host computer monitored the time between such requests and terminated the connection if a preset period of time was exceeded. Bigger.net also had the ability to monitor network activity, though it is unclear how this was done.

Other advertising-supported online services have included: CyberFreeway, which used a client application developed by HyperNet, Inc. of Tokyo, Japan; Juno Online, which provided free email; Tritium and Freewwweb.

Advertisers find it desirable to target advertisements to relevant potential customers. For example, an advertiser of stockings would prefer to target women rather than men with its advertising. A Boston restaurant would prefer to target residents of Boston and business travelers rather than children living in San Francisco. Moreover, advertisers prefer to pay for advertising based upon the number of relevant consumers who are actually exposed to the advertisement. For typical online systems and networks, including the Web, it is often difficult for an advertiser to precisely determine whether its advertisements were actually viewed by a user and for how long, and

whether the advertisement induced a response. Accordingly, there exists a need for a targeted advertisement system that also can provide information as to the characteristics of those who were exposed to each advertisement, for how long the user was exposed, and at what times.

It is believed that the prior art advertising-supported online services did not have the ability to target advertisements. Furthermore, their client applications are believed to have been limited in capabilities.

SUMMARY OF THE INVENTION

In accordance with the present invention, there is provided a client application for enabling access to an online service and displaying advertisements while the user has access to the online service. The client application receives play lists from the online service provider. The play lists include information about advertisements to be played and the order of play. The client application also receives match lists from the online service provider. The match lists include information about advertisements to be played when the user performs certain actions. The client application provides the user with the ability to cycle back through previously displayed advertisements, and to cycle forward. The client application displays advertisements continuously while the user has access to the online service, and also displays advertisements during the delay between when the client application is activated and when the user can actually use the online service.

In conjunction with the client application displaying advertisements, the client application also records which advertisements were played. The client application displays a number of icons for functions available to the user, and the client application records when the user selects these and other functions. The client application also records certain pre-connection events, such as dial-up errors. The client application transmits these records to the online service provider.

The client application monitors user inactivity with respect to the online service and automatically notifies the user of the inactivity. In one embodiment, the client

application causes a dialog to be displayed. The dialog notifies the user of the inactivity and includes at least one advertisement that is associated with a resource locator. The client application then terminates the online session if the user does not respond to the dialog.

Still further objects and advantages attaching to the system and to its use and operation will be apparent to those skilled in the art from the following particular description.

DESCRIPTION OF THE DRAWINGS

Further objects of this invention, together with additional features contributing thereto and advantages accruing therefrom, will be apparent from the following description of a preferred embodiment of the present invention which is shown in the accompanying drawings with like reference numerals indicating corresponding parts throughout and which is to be read in conjunction with the following drawings, wherein:

Figure 1 is a first block diagram of a network data distribution system in accordance with the invention.

Figure 2 is a second block diagram of a network data distribution system in accordance with the present invention.

Figure 3 is a representation of a display of a local device having a client window and a browser window.

Figure 4 is a flow chart of a method of monitoring web browsing by a user in accordance with the invention.

Figure 5 is a flow chart of a method of displaying advertisements to a user of an online service in accordance with the invention.

Figure 6 is a flow chart of a method of tracking advertisement-related events in accordance with the invention.

Figure 7 is an exemplary dialog that is used to notify a user of inactivity with the data distribution network.

These and additional embodiments of the invention may now be better understood by turning to the following detailed description wherein an illustrated embodiment is described.

DETAILED DESCRIPTION OF THE INVENTION

Throughout this description, the preferred embodiment and examples shown should be considered as exemplars, rather than limitations on the apparatus and methods of the present invention.

The System of the Invention

The system of the invention enables data, such as advertisements, to be sent to users based upon: the user's geographic location; the user's interactive data; the user's network usage data; the user's personal profile information; the scheduling requirements of the data to be sent; and the demographic requirements of the data to be sent.

Referring now to Figure 1, there is shown a block diagram of a network data distribution system in accordance with the invention in conjunction with a source of web pages. Figure 1 includes a local device 100, a data access network 120, an online or OSP server 130 and a web server 150. The local device 100, the data access network 120 and the OSP server 130 comprise the network data distribution system. The local device 100 is provided online service to the network data distribution system under control of the OSP server 130. An online service provider controls the OSP server 130.

The local device 100 preferably comprises a client computer which is configured to access the OSP server 130 via the local access network 120. The client computer may be, for example, a PC running a Microsoft Windows operating system. The local device 100 preferably includes an output device, such as display 101, and an input

device, such as keyboard 102 and / or pointing device 103 (e.g., mouse, track ball, light pen, or data glove). The local device 100 may also be, for example, an Internet appliance, network computer (NC), or an appropriately Internet-enabled device such as a portable digital assistant (PDA), mobile phone, refrigerator, etc. The particular type of device of the local device 100 is not considered to be important so long as the local device 100 can provide some measure of individual user interactivity with an online service.

The data access network 120 provides lower layer network support for the local device 100 to interact with online service, including the OSP server 130 and the web server 150. The data access network 120 preferably comprises a common or private bi-directional telecommunications network (e.g., a public switched telephone network (PSTN), a cable-based telecommunication network, a LAN, a WAN, a wireless network), coupled with or overlaid by a TCP/IP network (e.g., the Internet or an intranet).

The web server 150 may be of the type known in the art and has the ability to serve web pages to the local device 100, as requested in the manner known in the art. It should be appreciated that the web server 150 is representative of any source of web pages available to the local device 100. Thus, for example, the web server 150 could be accessible from the Internet, or it could be a part of an intranet and represents any number of web servers.

The OSP server 130 preferably is a computer system, such as a server computer. Alternatively, the OSP server 130 may be considered to represent a number of physical devices which as a group provide the indicated network services. The OSP server 130 acts as a recipient of certain information transmitted by the local device 100, as described further below. The OSP server 130 preferably also transmits certain data to the local device 100 as described further below.

Referring now to Figure 2, there is shown a block diagram of a network data distribution system of an online service in accordance with the present invention. The system comprises a client application 110, the data access network 120, the OSP server 130 and data stores 140a-g (collectively, 140). A browser application 160 is also shown. A "browser application" is software which provides interactive utilization of hypertext objects located on a network, such as web pages on the Internet. As used herein, "browser application" also includes most email clients and ftp clients. The client application 110 is a program operative on local device 100, and preferably an independent application program or a DLL. The client application 110 preferably retrieves certain network data, displays certain network data, transmits geographic location data, transmits interactive user data, transmits network usage data and transmits personal profile information as described below. The client application 110 preferably also sets up and provides access to the online service. The data stores 140 store and provide this geographic information data 140d, network usage data 140a, interactive usage data 140b, personal profile information 140g, data to be sent 140e, schedule for transmitting data 140f and demographics for transmitting data 140c.

The browser application 160, such as Microsoft Internet Explorer or Netscape Navigator is preferably installed on the local device 100. When the local device 100 is connected to the web server 150 through the data access network 120, the user of the local device browses the web server 150 from the local device 100 using the browser application. The browser application itself need not be stored on the local device 100. The important aspect is that the user, from the local device 100, can exercise control over what web pages are requested and thus displayed by the local device 100.

Each time a user uses the local device 100 to connect to the online service, the client application 110 and the OSP server 130 establish a session. In this session, the client application 110 transmits certain information regarding the user of the local device 100 and his use of the local device 100 while connected to the online service. The OSP server 130, on the other hand, uses the information from the client application 100 to determine information which should be sent to the client application 110. Preferably, the information from the client application 110 is used by the OSP server 130 to select advertisements which the local device 100 should display. The client application 110 then causes these advertisements to be displayed on the local device's output device 101.

The information from the client application 110 regarding the user preferably includes geographic data and personal profile information. Geographic data indicating the user's current location preferably is sent from the client application 110 to the OSP server 130, which then stores the geographic data in the data store 140d. This geographic data can be something simple, like a phone number. The user preferably

provides personal profile information on a periodic basis which is stored in the data store 140g and used by the OSP server 130. Personal profile information is defined as any information that describes the user. This information includes (but is not limited to) things such as: age, sex, marriage status, home address and personal interests. Personal profile information may be provided directly by the user or synthesized through analysis of the user's interaction with the online service.

The information regarding the user's use of the local device 100 includes email usage, web usage and advertisement click-throughs. The user's interactions and feedback with the web server 150 provided through the browser application 160 are preferably captured by the client application 110, analyzed by the OSP server 130 and stored in the data store 140b. This includes the user's feedback and responses to the data delivered to the browser application 160. The user's activities on the web server 150 provided through the browser application 160 are preferably captured by the client application 110, analyzed by the OSP server 130 and stored in the data store 140a. This includes the type of network data the user requests and accesses. This data is preferably summarized and classified into multiple demographic profiles.

The data to be sent to users preferably has scheduling requirements that dictate when it should be sent. These scheduling requirements include (but are not limited to): frequency, maximum number of times to send to an individual, minimum number of times to send to an individual, time of day to send, and first and last days to send. The data to be sent to users can have demographic requirements that dictate to whom it

should be sent. These include (but are not limited to): personal profile, interactive data, network usage information and geographic location.

Referring now to Figure 3, there is shown the display 101 having a client window 200 and a browser window 300. The client window 200 is generated and controlled by the client application 110. The browser window is generated and controlled by the browser application 160, here Microsoft Internet Explorer. The browser window 300 is familiar to those skilled in the art, so the particulars are not described further herein. Further information regarding the use of most browser applications and their technical specifications is abundantly available.

The client window 200 includes a title bar 230, an advertising pane 210, a number of operational icons 205, 215, 220, 240, 250 on the title bar 230, and a number of button bar icons 260, 265, 270, 275 on a button bar 280. The title bar 230 preferably identifies the name of the OSP. The advertising pane 210 is a space in which the client application 110 displays advertisements.

The button bar icons 260, 265, 270, 275 preferably provide one-click access to Web pages and / or menus that might be useful to the user. The online service provider can sell the button bar icons to third parties as an additional revenue source. These icons 260, 265, 270, 275 are associated with particular URLs. The icon 260 is associated with a start page. The icon 265 is associated with an online shopping mall page. The icon 270 is associated with an online technical support page from the online service provider. The icon 275 is associated with an online search engine page. By

clicking on any of these icons 260, 265, 270, 275, the client application 110 causes the browser application 160 to load the Web page having the URL associated with the selected icon.

The operational icons 205, 215, 240, 250, 280 on the title bar 230 preferably provide one-click access to operational features of the client application 110. As explained below, the client application 110 maintains records of the advertisements which have been displayed. The cycle back icon 205 allows the user to review advertisements which were previously displayed by the client application 110, in the reverse order in which the advertisements were displayed. If the user has cycled back through advertisements, the cycle forward icon 215 allows the user to review advertisements in the order in which the advertisements were displayed by the client application 110. The search icon 240 provides convenient access to online searching facilities. The close icon 250 causes the client window 200 to close, and thus also causes the session with the online service to terminate.

The menu icon 280 provides access to a menu of additional menu items and functions. The menu preferably provides alternative and enhanced access to the features associated with the button bar icons 260, 265, 270, 275 and the other operational icons 205, 215, 240, 250. In addition, the menu preferably provides the user with the ability to hide or show the title bar 230 and / or the button bar 280. The menu preferably also allows the user to access and edit his profile. The menu preferably provides the user with the option of positioning the client window 200 at any of a number of predefined

positions, such as top left corner of the display 101, top right corner, bottom left corner, or bottom right corner.

The browser window 300 includes a display pane 310, an address bar 320 and a title bar 330. The display pane 310 is a region of the browser window 300 wherein the browser application causes web pages received by the browser application to be displayed. The address bar 320 is another region of the browser window 300 and the browser application displays URLs in the address bar 320 corresponding to the web page currently displayed in the display pane 310. The user can also enter a URL into the address bar 320, and the browser application will attempt to load the web page or other object to which the entered URL points. The primary feature of the title bar 330 is that it displays the title of the browser application. Another feature of most browsers is that the title bar 330 displays the title of the web page then displayed in the display pane 310.

The client window 200 is displayed on top of the browser window 300. Preferably, the client window 200 remains visible and on top of all other windows so long as the communication channel to the OSP server 130 is open. The client application 110 preferably can control the location of the client window 200 on the display 101. For example, the client application 110 preferably allows the user to select one of several predefined locations for the client window 200, such as lower left corner, upper right corner, etc. Some operating systems such as Microsoft Windows permit windows to be moved to the edge of the display 101 so that only a small portion of the window is visible. The client application 110 preferably can also prevent the client

window 200 from being moved off of the visible area of the display 101. When the user attempts to hide all or a part of the client window 200, the client window preferably moves the client window 200 to a fully visible area of the display 101.

The Methods of the Invention

Referring now to Figure 4, there is shown a flow chart of a method of distributing data in a network in accordance with the invention. The components 110, 120, 130, 140 work together to deliver data that meets the geographic and demographic criteria.

After the method begins (step 405), the user preferably uses the client application 110 to connect to the data access network 120, and then the OSP server 130 (step 410). The particular manner of the connection depends on the network infrastructure underlying the connections. The important aspect of this step 410 is that a communications channel is established between the client application 110 and the OSP server 130. By "communications channel," it is meant a logical path for data transmission. The OSP server 130 preferably acts as a gatekeeper to the online services. During establishment of the communication channel, the client application transmits a request to the OSP server to authorize the local device to interact with the web server 150 and other resources of the online service. Only after the OSP server 130 has authorized access can the local device 100 access the web server 150 and the other resources of the online service.

The communication channel may be of two varieties – dial-up or constant-connection. In a dial-up communication channel, the connection to the online service becomes available only after the local device 100 creates a physical link to the online network and then a logical link to the online network. For example, the local device 100 has a dial-up communication channel if the local device 100 has a modem and connects through tone dialing to the online service using the PSTN. In a constant-connection communication channel, the connection to the online service is always available to the local device 100, and the local device need only create a logical link to the online network. For example, the local device 100 has a constant-connection communication channel when the local device 100 has a cable modem and connects to the online service using a cable service. Other examples of constant-connection communication channels are Integrated Services Digital Network (ISDN) and Digital Subscriber Line (DSL).

If this is the first time the user has connected (step 415), then the OSP server 130 preferably requires the user to use the local device 100 to submit personal profile information (step 420). Preferably, the OSP server 130 periodically will request (step 425) that the client application 110 have the user update this profile (step 430).

The personal profile information is preferably maintained by the OSP server 130 within a user information record, referred to as a User Record, comprising a file that is stored in one of the data stores 140. The User Record preferably contains a plurality of data fields that each correspond to some informational aspect or demographic category associated with the user. A demographic category means any type of informational

category this is used to define the user. In one embodiment, the User Record includes data fields that are associated with at least each of the following demographic categories for the user: name, age, gender, street address, state, country, zip code, income, occupation, education level, marital status, hobbies, and family size. The demographic categories may also relate to various other user interests, such as sports interests and musical interests.

Each time the local device 100 connects to the OSP server 130, the OSP server 130 preferably obtains data indicating the local device's current geographic location (step 435). This geographic information is preferably derived from a local access phone number used by the client application 110 to connect to the data access network 120, and the client application 110 transmits its local access phone number to the OSP server 130 for geographic determination purposes.

Once connected, a number of processes are preferably started (step 440). In one of these processes, whenever the user interacts with data received on the client application 110, the client application 110 sends feedback information respecting this interaction to the OSP server 130. The OSP server 130 then summarizes and classifies the feedback information into demographic profiles stored in the data store 140.

In another of these processes, whenever a user uses the browser application 160 to request or access data from the web server 150, the client application 110 sends feedback information respecting these requests and data accesses to the OSP server 130.

The OSP server 130 then summarizes and classifies this feedback information into the demographic profiles in the data store 140.

In another of these processes, while a user's local device 100 is connected to the web server 150, the OSP server 130 determines which targeted data needs to be sent to the client application 110 and then transmits this targeted data to the client application 110. The OSP server 130 accomplishes this by:

examining the scheduling requirements to determine which data needs to be sent;

examining the demographic requirements of the data to determine to which demographic profiles the data needs to be sent;

selecting the users who are currently connected that meet the demographic requirements of the data; and

sending the data to the selected users.

As mentioned, one of the processes relates to the display of data, and particularly advertisements, in the client window 200. Methods of displaying advertisements to a user of an online services are described next.

Referring now to Figure 5, there is shown a flow chart of a method of displaying advertisements to a user of an online service in accordance with the invention. This

method generally involves the display of advertisements during a logon process and then also during usage of the online service.

After the method begins (step 505), the client application is activated (step 510). The client application 110 may be installed during manufacture of the local device 100, during use of the local device 100 at the instigation of the user, or may occur automatically as a consequence of other processes. Furthermore, the client application 110 may be activated either manually or automatically. Although at least some aspects of the client application 110 should be operable from the local device 100, the client application 110 need not be stored on the local device 100 and can be run from a remote location.

Preferably, after the client application 110 is activated, the client application 110 displays the client window 200 on the display 101 (step 515). In the next step (step 520), the client application 110 displays advertisements in the ad pane 210. In the case of dial-up and constant-connection communication channels, the communication channel to the online service might not yet be established or fully open at this point. Thus, the client application 110 cannot obtain the advertisements from the online service. Instead, the client application 110 obtains the advertisements locally. For example, during installation of the client application 110 one or more advertisements are installed on the local device 100 for display outside of a session. Alternatively, the advertisements may be downloaded to the local device at the beginning of a session, during a session, or as part of the termination of a session.

Where it is not desired to display advertisements prior to full establishment of the communication channel, then it is preferred also that the ad pane 210 not be displayed. In such embodiments, it might be desirable to provide a different configuration of the client window 200 than that shown in Figure 3. For example, the client window 200 might show the status of the connection process.

The client application 110 preferably includes an ad display process which is responsible for displaying advertisements in the ad pane 210. The ad display process preferably operates in accordance with a play list. The play list comprises one or more ad objects. The ad objects are preferably data constructs which each include a resource locator of an advertisement to be displayed, a resource locator to be accessed if the user clicks on (or otherwise selects) the advertisement when displayed in the ad pane 210, and a number of attributes for the display of the advertisement. The display attributes may be one or more of, for example: fade, wash, sweep, fly, blinds, box, checkerboard, crawl, dissolve, peak, spiral, split, stretch, strips, swivel, wipe, zoom. These types of display attributes are well known (though not necessarily with respect to online services) and are therefore not described further herein. The ad objects preferably also specify how long the advertisement should be displayed. Other display attributes are within the scope of the invention. The play list preferably specifies an order in which the advertisements identified in the play list are to be displayed.

Typically, advertisements in the online industry are associated with a resource locator, and more typically with a URL. As is well known, when a user uses his pointing device 103 to click on an online advertisement in a browser's window such as

browser window 300, the browser application loads the resource at the associated URL. This is commonly known as "click-through." In accordance with the invention, if during the display of an advertisement in the ad pane 210, the user clicks-through on the advertisement, then the client application 110 causes the resource locator associated with the advertisement to be loaded by the browser application 160. If the browser application 160 is not open at the time, then the browser application is first opened and then pointed to the resource locator associated with the advertisement. If the resource locator is not for a web page, the client application 110 or some other software in the local device 100 preferably causes the appropriate application to open so that the resource locator may be opened.

Preferably, the client application 110 displays advertisements from the time that the client application 110 is activated. To accomplish this, the client application 110 preferably is provided with a logon play list for use before the communication channel with the OSP server 130 is open. The client application 110 preferably is also provided with the advertisements referenced in the logon play list. The logon play list is preferably stored on the local device 100 during installation of the client application 110. Subsequently, during each session with the online service, the OSP server 130 provides a new logon play list and the advertisements referenced by the new logon play list to the client application 110 for use by the client application 110 during the next logon. The OSP server 130 can transmit the new logon play list in any of several ways, such as part of establishment of the communication channel to the OSP server 130, during the user's session with the online service, or as part of the closing of the

communication channel. The latter is preferred, since it proves the online service provider with the best targeting control.

It should also be appreciated that, where there is a constant-connection communication link, a logon play list can be communicated from the OSP server 130 to the client application 110 at any time. Similarly, in some dial-up environments, such as ISDN, a logon play list can be communicated from the OSP server 130 to the client application 110 at any time using signaling channels or other off-line means.

In the next step (step 525), the client application 110 establishes a communication channel to the online service. With the communication channel established, the client application 110 can now receive a new play list from the OSP server 130 (step 530). This online play list can reference advertisements which are in the data access network 120. In some embodiments, it may be desirable for the OSP server 130 to transmit additional or replacement play lists and / or ad objects to the client application 110.

The client application 110 preferably also receives from the OSP server 130 a match list. The match list comprises one or more match objects. The match objects each comprise an activity identifier and an ad object. The match list guides the client application 110 to display certain advertisements notwithstanding the play list. The activity identifier preferably comprises resource locators and keywords which are used for targeting advertising to the user. The activity identifier may also be an object which

altogether describes an online activity in which the user may become involved, such as email or chat.

During the user's session with the online service, the client application 110 preferably monitors the user's interaction with the data access network 120. If the user's interaction with the network matches one of the activity identifiers in the match list, then the ad display process displays the advertisement of the ad object corresponding to the matched activity identifier. Methods for monitoring the online activities of an online user are described in the related application referenced above.

The client application then displays advertisements in accordance with the on-line play list and the match list (step 535), and this continues while the user uses the online service (step 540).

As an example of the use of the match list, if the user points his browser application 160 to a Web site which the online service provider has previously identified to relate to sale of automobiles, then the online service provider preferably would run an advertisement targeting a potential purchaser of an automobile. The Web site may be identified from its URL, and if the URL is an activity identifier in the match list, the client application 110 can cause the appropriate advertisement to be displayed.

As another example, the user might go to a search engine which is known to the online service provider, and search for information about the sale of automobiles based upon the keywords "automobile sales." The client application 110 preferably checks if the keywords sent to these selected search engines are activity identifiers in the match

list. If so, then the client application 110 preferably displays the appropriate advertisement.

At some point, the user's online session will end. To manually close the session, the user can select icon 250 in the client window 200 (Figure 2). The client application 110 preferably provides the user with the opportunity to confirm the closing of the session (step 545). If the user cancels closure, then the method continues at step 535. If the user confirms closure, then the client application 110 closes the communication channel to the online service (step 550), and the method ends (step 555).

The client application 110 preferably monitors the user's interaction with the local device in order to determine whether the user has been inactive with respect to the online service. The client application 110 automatically initiates certain actions in response thereto, such as notifying the user of such inactivity or disabling the user's access to the online service. The user inactivity may be with respect to the data access network 120, or more preferably, with respect to the client application 110. If the user has been inactive for a predetermined period of time, then the client application 110 preferably displays a notification on the display 101, such as in the form of a dialog 700 (Figure 7), in which the user is notified of the inactivity, as discussed more fully below.

In addition to the client application causing the dialog 700 to be displayed, the client application preferably also pauses the play list when it is determined that the user has been inactive for the predetermined amount of time. When the play list is paused, the currently-displayed advertisement preferably remains displayed in the client window

200 until the play list is un-paused. When the play list is un-paused, the advertisements are preferably continued from the point in the play list at which it was paused. Such action preferably reduces the likelihood of "wasting" advertisements by continuing to display them even when the user is not interacting with the data access network 120. Alternatively, after un-pausing, the advertisements may be displayed from the beginning of the play list, or the client application may prompt the OSP server 130 to download a new play list.

With reference to Figure 7, the dialog 700 preferably notifies the user that the user has been inactive with respect to the online service for the predetermined time period. A display box 705 comprising at least one sponsored advertisement is preferably displayed in the dialog 700. The advertisement is preferably associated with a resource locator to be accessed if the user clicks on (or otherwise selects) the advertisement. The advertisement is preferably not part of the play list. This allows the online service provider to sell the advertisement to advertisers apart from inclusion in the play list.

The dialog 700 is preferably displayed prominently on the display 101 to increase the likelihood of the dialog 700 catching the user's attention. Toward this end, the client application 110 preferably also causes the local device 100 to deliver an audio signal to the user whenever the dialog 700 is displayed. The client application 110 may also initiate other means of notifying the user of inactivity, in combination with and/or in place of the dialog 700. For example, the client application 110 may cause a

notification to appear in the browser window 300 or in any other window on the display 101.

Preferably, the dialog 700 provides the user with the option to continue the online session. If the user elects to continue the online session, such as by clicking an acknowledgement button 710, then the client application 110 preferably un-pauses the play list and continues to display advertisements in accordance with the play list. If the user elects not to continue with the online session, such as by failing to click on the button 710, then the client application 110 initiates some predetermined action, such as closing the communication channel (for dial-up connections), disabling the transfer of data across the communication channel, and/or closing the client window 200.

In the case of dial-up connections, closing of the communication channel is the preferred action that occurs in response to user inactivity. This is preferably be accomplished on the client side by the client application 110 "hanging up" on the user or disconnecting the PSTN connection between the local device and the OSP server 130. Closing of the communication channel prevents the user from incurring additional phone charges and from unnecessarily accessing telephone lines. Additionally, the client window 200 is preferably removed from display on the display device 101 when the communication channel is closed.

For a constant-connection, however, the client application 110 does not actually close the communication channel between the local device 100 and the OSP server 130, as the communication channel is "always on." Thus, in the case of a constant-

connection, the preferred action is pausing of the play list, closing the client application 110, or closing or minimizing the client window 200. The OSP server 130 also preferably removes the local device's authorization to access the web server 150 and the other resources of the online service until the user again interacts with the online service, such as by re-loading the client application 110 or interacting with the client window 200.

In the case of a constant-connection communication channel, the client application 110 preferably monitors the user's activity with the local device 100 with respect to the online service and thereby detects whether the user is interacting with the online service. Like a screen saver in reverse, the client application 110 detects some period of inactivity and causes the client window 200 to be closed. Alternatively, the client window 200 could remain on the display even when the user's session is terminated, but the client application 110 would allow other windows to be displayed on top of the client window 200. If the user desired to open a session with the online service, the client window 200 would again have to be on top of all other windows, either through automatic or manual means.

Prior to closing the client window 200, the client application 110 preferably detects some period of user inactivity and cause the client window 200 to be closed. Alternatively, the client window 200 could remain on the display even after it is determined that the user has been inactive with respect to the online service for the predetermined time span, but the client application 110 would allow other windows to be displayed on top of the client window 200. If the user desired to re-continue the

session with the online service, the client window 200 would again have to be on top of all other windows, either through automatic or manual means.

As used herein, the term "user inactivity" refers to the user failing to interact with the local device 100 for a predetermined time span. User inactivity preferably comprises the user failing to interact with the local device with respect to the online service. "User interaction" comprises a user manipulating a computer input device, such as a keyboard or mouse, with respect to local device, and preferably with respect to the client application 200 or the browser window 300. The client application preferably monitors the user interaction such as by monitoring whether the user moves a mouse.

Preferably, user interaction is measured with respect to the user interacting with the online service using the client window 200 in order to encourage the user to give more attention to and interact with the client window 200. For example, one measure of user inactivity may comprise the user failing to click on any of the advertisements that are displayed in the client window 200. Another measure of user inactivity may comprise the user failing to interact in any way with the client window 200, such as by failing to click on any of the functional icons 260, 265, 270, or 275. User inactivity may also be measured with respect to the user's interaction with the browser application 160, such as the user failing to download data using the browser window 300.

User inactivity is preferably monitored locally by the client application 110, particularly if user inactivity is measured with respect to the user's interaction with the local device 100 or software stored on the local device 100. The OSP server 130 is also

configured to monitor user inactivity, particularly if user inactivity is measured with respect to the user's interaction with the web server 150.

As can be seen, this process permits browsing by the user and displaying of advertisements by the client application 100 without interfering with the user's use of the browser application.

In addition to the display of advertisements, the client application 110 preferably records a number of types of events and transmits these records to the OSP server 130. Tracked events fall into three categories: connection events, advertising events, and operational events. Referring now to Figure 6, the event tracking capabilities of the client application 110 are described. Event tracking begins after the client application 110 is activated (step 610). After an event occurs (step 615), as described further below, the client application stores an event record (step 620). At a time appropriate for the event record, the client application 110 transmits the event record to an interactive data server such as the OSP server 130 (step 630). This continues until the session is terminated (step 635).

The connection events include failed connection attempts, such as when the client application 110 attempted a dial-up session and encountered no dial tone, a busy signal, or some other error from the physical network. The connection event records allow the online service provider to better understand where the users are experiencing difficulties, and to therefore remedy problems and enhance operations without necessitating user feedback. This is important because the connection event records

may provide more timely and accurate information about a user's experiences, and further allows the online service provider to diagnose problems based upon common characteristics of users who have had problems.

The advertising events relate to the display of advertisements by the client application 110. Each time the client application 110 displays an advertisement (commonly referred to as an "impression"), the client application 110 preferably records an identifier of the advertisement. These records are used by the client application 110 to permit the user to cycle back through previously displayed advertisements, and then to cycle forward through the advertisements. Cycle-back and cycle-forward is made available to the user, for example, through the cycle-back icon 205 and the cycle-forward icon 215. The client application 110 preferably also records errors encountered in attempting to fetch and display advertisements.

In accordance with the invention, special attention is given to the user's selection of advertisements in the ad pane 210. To track the effectiveness of advertisements displayed in the ad pane 210, the client application 110 may also track how long the client application displays an advertisement before the user clicks-through, and an average of how long the client application 110 displays an advertisement before the user clicks-through. This information, as well as records of what Web sites the user has browsed, are preferably used by the online service provider to enhance advertisement targeting criteria, to enable dynamic advertisement targeting, and to track the performance of advertisements displayed in the ad pane 210.

The operational events relate to the user's use of certain features of the client application 110. The operational events thus include attribute settings such as whether the user has hidden the title bar 230 and / or the button bar 280, and where the user has placed the client window 200 on the display 101. The client application 110 further recognizes as events each icon 205, 215, 240, 250, 260, 265, 270, 275, 280 which the user has selected (clicked-on). These operational event records allow the online service provider to better understand how the users are using the online service and to therefore enhance the quality of the client application 110 and the user's online experience.

In general, the client application 110 transmits most types of event records in a batch form. The online service provider preferably specifies the number of events to record before transmitting the event records, and this number preferably may be adjusted during a session. However, some event records should be transmitted without delay – most notably click-throughs. Click-throughs are not batched because the fact of these events is preferably used by the OSP server for refinement of dynamic advertisement targeting.

Although exemplary embodiments of the present invention have been shown and described, it will be apparent to those having ordinary skill in the art that a number of changes, modifications, or alterations to the invention as described herein may be made, none of which depart from the spirit of the present invention. All such changes, modifications and alterations should therefore be seen as within the scope of the present invention.

CLAIMS

It is claimed:

1. A method of[SCS1] displaying advertisements to a user of an online service using a client application on a local device, the local device including an input device and an output device, the user using the local device for accessing an online server associated with the online service and providing interaction with the online service, the method comprising the steps of:

the client application activating;

the client application establishing a communication channel from the local device to the online server;

a browser application activating;

the client application causing at least one advertisement to be displayed on the output device of the local device;

the client application monitoring the user's interaction with the local device with respect to the client application and thereby detecting whether the user is interacting with the online service;

if the user has not interacted with the local device with respect to the client application for a predetermined amount of time, the client application causing a dialog to be displayed on the output device of the local device, wherein the dialog notifies the

user that the user has been inactive with respect to the online service, and wherein a display associated with a resource locator is displayed in the dialog.

2. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 1, wherein the resource locator is associated with an advertisement.

3. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 1, wherein the display of at least one advertisement operates in accordance with a first play list, the first play list comprising at least one ad object, each ad object comprising a resource locator for a given advertisement, a resource locator for a click-through associated with the given advertisement, and at least one display attribute for the given advertisement, the first play list further specifying an order in which the advertisements identified in the play list are to be displayed.

4. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 3, additionally comprising the client application pausing the play list if the user has not interacted with the local device with respect to the client application for the predetermined amount of time.

5. The method of displaying advertisements to a user of an online service using a

client application on a local device of claim 1, wherein at least one advertisement is displayed in a client window displayed by the client application.

6. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 5, wherein the client application determines that the user has not interacted with the local device with respect to the client application for a predetermined amount of time if the user has not clicked on an advertisement in the client window within the predetermined amount of time.

7. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 5, wherein the client window includes a plurality of user-selectable icons, each icon being associated with a given function of the client application, and wherein the client application determines that the user has not interacted with the local device with respect to the client application for a predetermined amount of time if the user not has not clicked on any of the icons within the predetermined amount of time.

8. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 1, wherein the client application establishes the communication channel by creating a physical link between the local device and the online server via a public switched telephone network.

9. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 1, wherein the client application establishes the communication channel via a cable modem connection.

10. A method of displaying advertisements to a user of an online service using a client application on a local device, the local device including an input device and an output device, the local device having a continuous communications link to an online server associated with the online service, the user using the local device for accessing the online service and providing interaction with the online service, the method comprising the steps of:

the client application activating;

a browser application activating;

the browser application displaying a browser window on the output device of the local device;

the client application causing at least one advertisement to be displayed in a window on the output device of the local device;

the client application monitoring the user's interaction with the window and thereby detecting whether the user is interacting with the online service;

the client application removing the window from the output device of the

local device if the user has not interacted with the window for a predetermined amount of time.

11. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 9, wherein the window is a client window displayed by the client application.

12. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 11, the method further comprising, after the client window had been removed from display on the local device, the client application re-displaying the client window on the output device of the local device if the user interacts with the browser application.

13. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 9, wherein the display of at least one advertisement operates in accordance with a first play list, the first play list comprising at least one ad object, each ad object comprising a resource locator for a given advertisement, a resource locator for a click-through associated with the given advertisement, and at least one display attribute for the given advertisement, the first play list further specifying an order in which the advertisements identified in the play list are to be displayed.

14. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 13, additionally comprising the client application pausing the play list if the user has not interacted with the local device with respect to the window within the predetermined amount of time.

15. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 9, wherein the client application causes the client window to be displayed on top of the browser window on the output device and prevents any other window which might be caused to be displayed on the output device from being displayed on top of the window.

16. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 15, wherein the client application allows other windows to be displayed on top of the client window if the user has not interacted with the client window within the predetermined amount of time

17. A method of displaying advertisements to a user of an online service using a client application on a local device, the local device including an input device and an output device, the user using the local device for accessing an online server associated with the online service and providing interaction with the online service, the method comprising the steps of:

the client application activating;

the client application establishing a communication channel from the local device to the online server;

a browser application activating;

the client application causing advertisements to be displayed in a window on the output device of the local device, wherein the display of advertisements operates in accordance with a first play list, the first play list comprising at least one ad object, each ad object comprising a resource locator for a given advertisement, a resource locator for a click-through associated with the given advertisement, and at least one display attribute for the given advertisement, the first play list further specifying an order in which the advertisements identified in the play list are to be displayed

the client application monitoring the user's activity with the local device with respect to the client application and thereby detecting whether the user is interacting with the online service;

the client application pausing the play list if the user has not interacted with the local device with respect to the client application for a predetermined amount of time.

18. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 17, the method further comprising the client

application displaying a dialog if the user has not interacted with the local device with respect to the client application for a predetermined amount of time, wherein the dialog provides the user with notification that the user has not interacted with the local device with respect to the client application for the predetermined amount of time and wherein an advertisement is displayed in the dialog.

19. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 17, wherein the window is a client window displayed by the client application.

20. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 17, the method further comprising the client application closing the communication channel if the user has not interacted with the local device with respect to the client application for a predetermined amount of time.

21. The method of displaying advertisements to a user of an online service using a client application on a local device of claim 20, wherein the client application establishes a communication channel from the local device to the online server via telephone connection.

22. A system for displaying advertisements to a user of an online service, the user utilizing the online service with a local device, wherein the local device displays

advertisements from the online service the system comprising a computer program product comprising a computer usable medium having software for causing the local device to:

establish a communication channel from the local device to the online server;

activate a browser application;

display at least one advertisement in a window of an output device of the local device;

monitor the user's interaction with the local device with respect to the client application and thereby detect whether the user is interacting with the online service;

if it is determined that user has not interacted with the local device with respect to the client application for a predetermined amount of time, display a dialog on the output device of the local device, wherein the dialog notifies the user that the user has been inactive with respect to the online service, and wherein a display associated with a resource locator is displayed in the dialog.

23. The system for displaying advertisements to a user of an online service of claim 22, wherein the resource locator is associated with an advertisement.

24. The system for displaying advertisements to a user of an online service of claim

22, wherein the display of at least one advertisement operates in accordance with a first play list, the first play list comprising at least one ad object, each ad object comprising a resource locator for a given advertisement, a resource locator for a click-through associated with the given advertisement, and at least one display attribute for the given advertisement, the first play list further specifying an order in which the advertisements identified in the play list are to be displayed.

25. The system for displaying advertisements to a user of an online service of claim 22, the software further for causing the local device to pause the play list if the user has not interacted with the local device with respect to the client application for the predetermined amount of time.

26. The system for displaying advertisements to a user of an online service of claim 22, wherein the window is a client window displayed by the client application, and it is determined that the user has not interacted with the local device with respect to the client application for a predetermined amount of time if the user has not clicked on an advertisement in the client window within the predetermined amount of time.

27. The system for displaying advertisements to a user of an online service of claim 22, wherein the window is a client window displayed by the client application, and the client window includes a plurality of user-selectable icons, each icon being associated with a given function of the client application, and wherein it is determined that the user

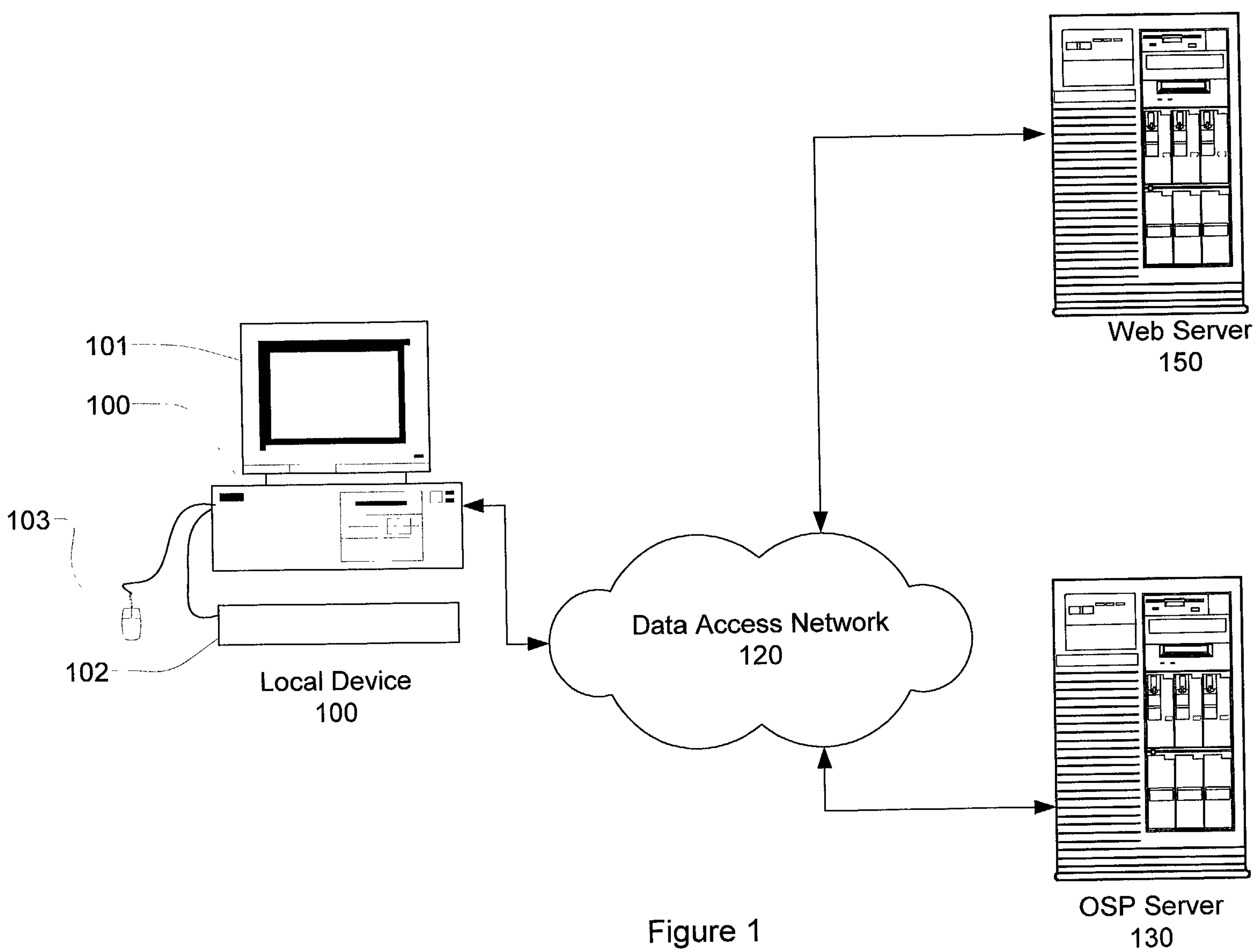
has not interacted with the local device with respect to the client application for a predetermined amount of time if the user not has not clicked on any of the icons within the predetermined amount of time.

28. The system for displaying advertisements to a user of an online service of claim 22, wherein the local device establishes the communication channel by creating a physical link between the local device and the online server via a public switched telephone network.

29. The system for displaying advertisements to a user of an online service of claim 22, wherein the local device establishes the communication channel via a cable modem connection.

ABSTRACT OF THE DISCLOSURE

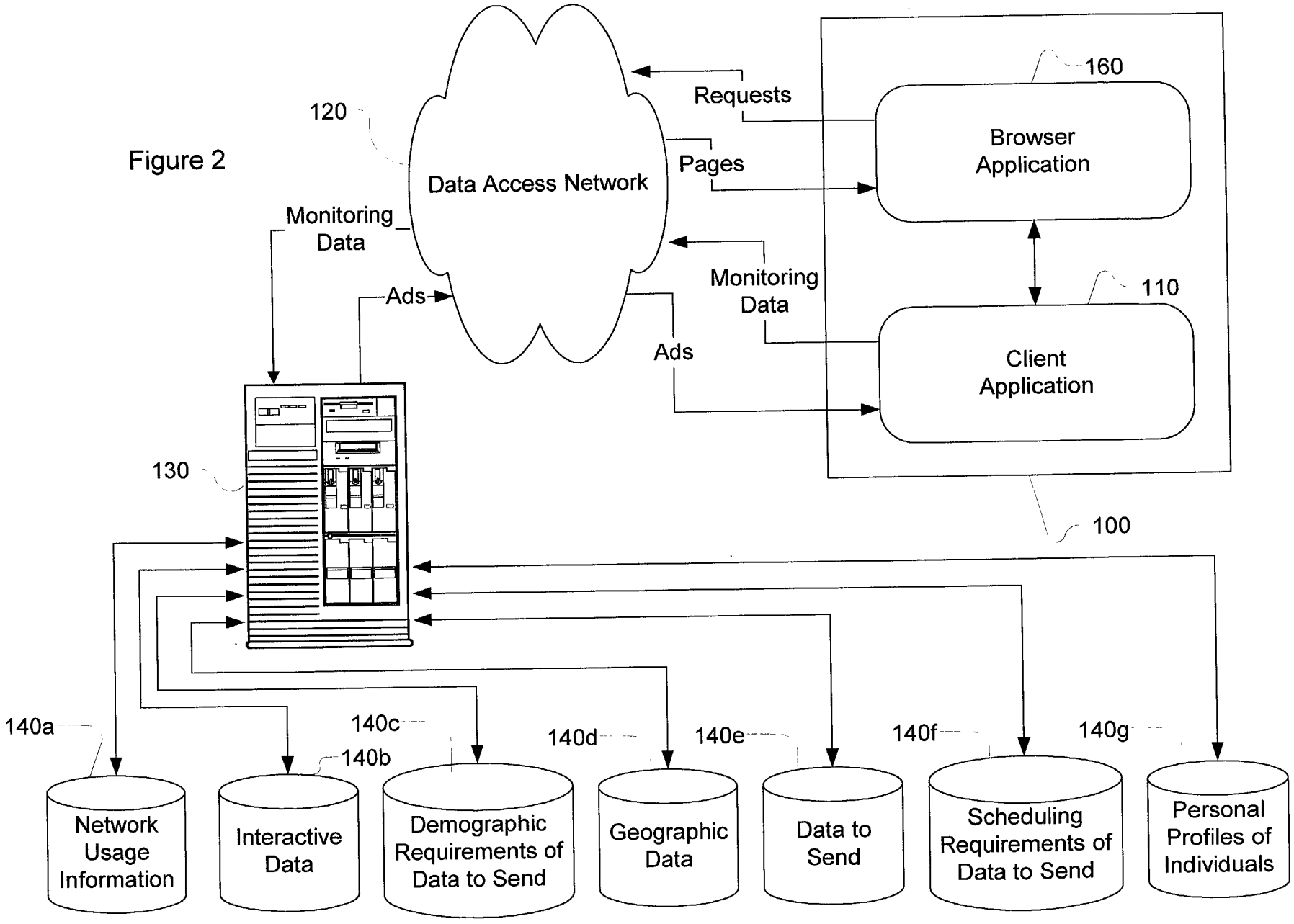
In accordance with the present invention, there is provided a client application for enabling access to an online service and displaying advertisements while the user is accessing the online service. The client application receives play lists from the online service provider. The play lists include information about advertisements to be played and the order of play. The client application monitors the user's interaction with respect to the online service, and preferably with respect to the client application. The client application notifies the user if the user has not interacted with the online service for a predetermined time span. The client application also displays an exit window prior to termination of an online session. The exit window includes advertisements that are targeted toward the user.



101
100
103
102
Local Device
100
Data Access Network
120
Web Server
150
OSP Server
130

Figure 1

Figure 2


120
Data Access Network
Requests
Pages
Monitoring Data
Ads
Monitoring Data
Ads
160
Browser Application
110
Client Application
130
100
140a
Network Usage Information
140b
Interactive Data
140c
Demographic Requirements of Data to Send
140d
Geographic Data
140e
Data to Send
140f
Scheduling Requirements of Data to Send
140g
Personal Profiles of Individuals

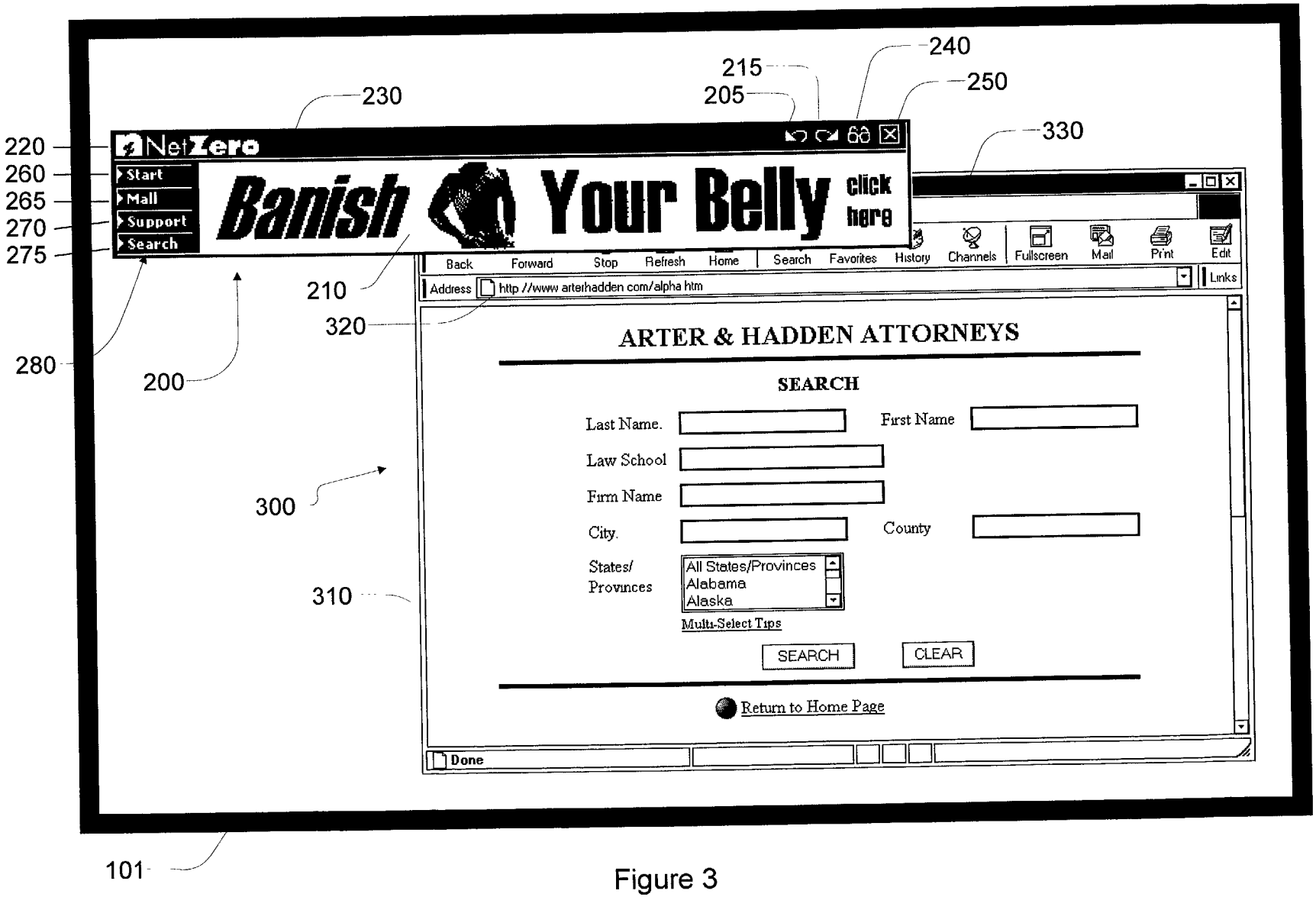


Figure 3

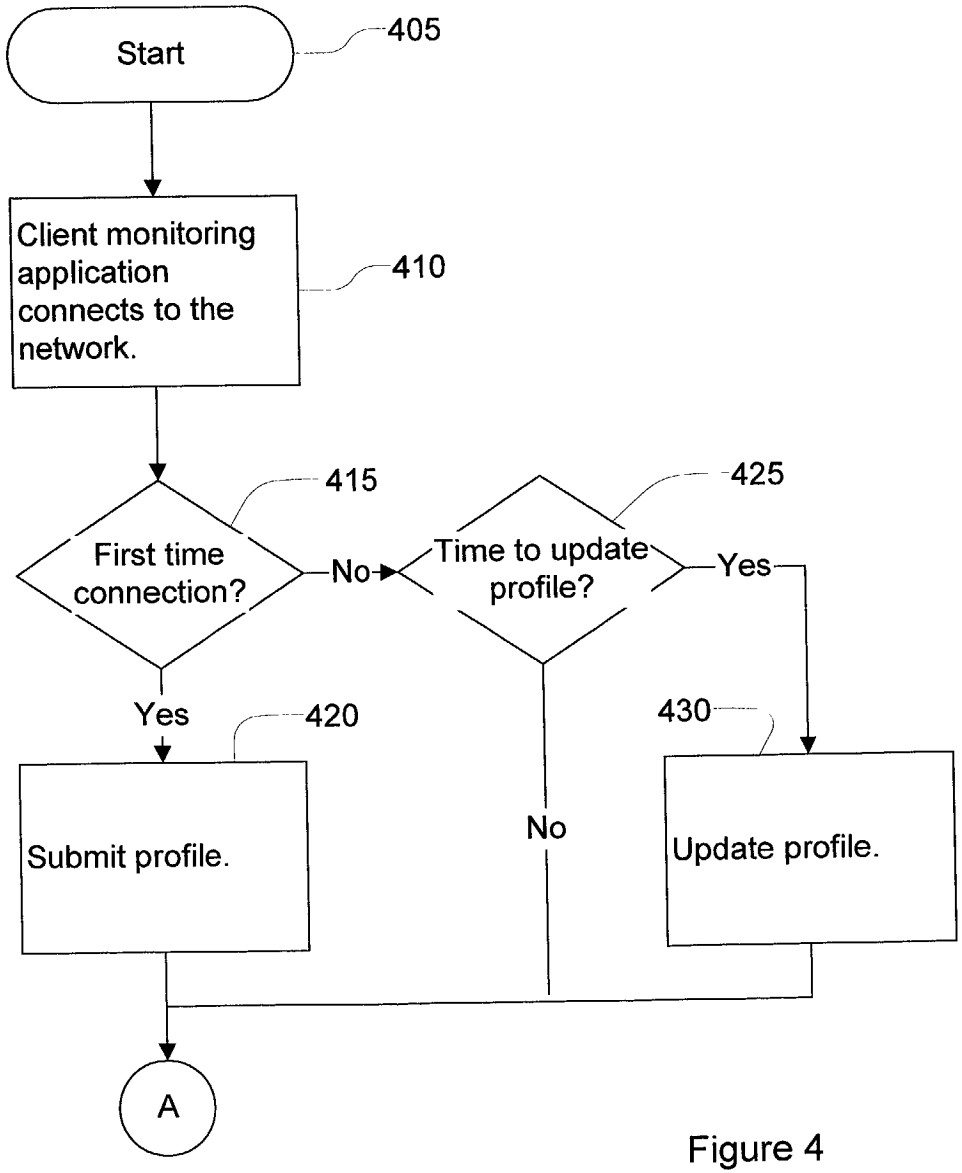

Start
405
Client monitoring application connects to the network.
410
First time connection?
415
No
Time to update profile?
425
Yes
Yes
420
Submit profile.
No
430
Update profile.
A
A
Send location information.
435
Start processes.
440

Figure 4

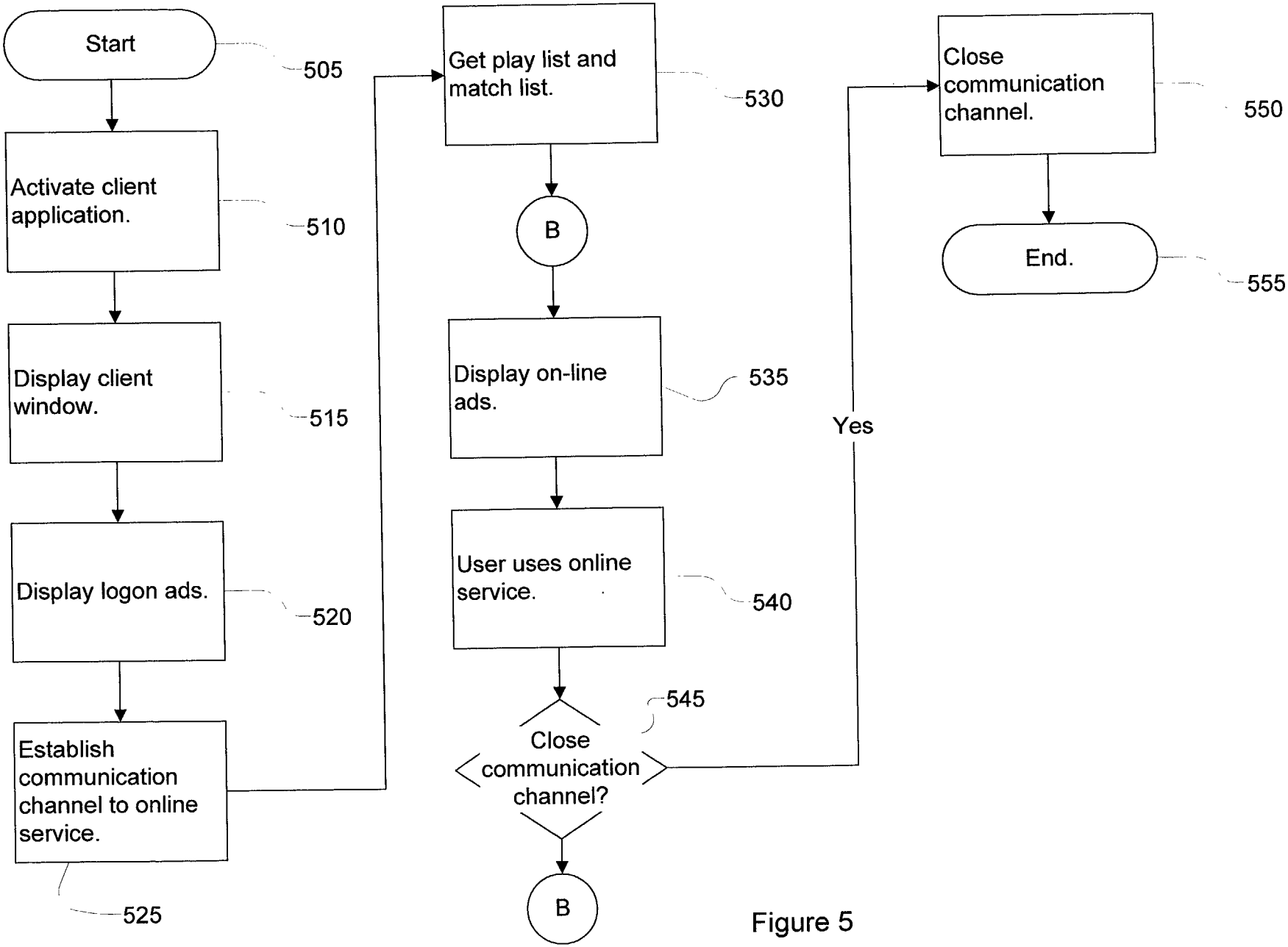

Start
505
Activate client application.
510
Display client window.
515
Display logon ads.
520
Establish communication channel to online service.
525
Get play list and match list.
530
B
Display on-line ads.
535
User uses online service.
540
545
Close communication channel?
Yes
B
Close communication channel.
550
End.
555

Figure 5

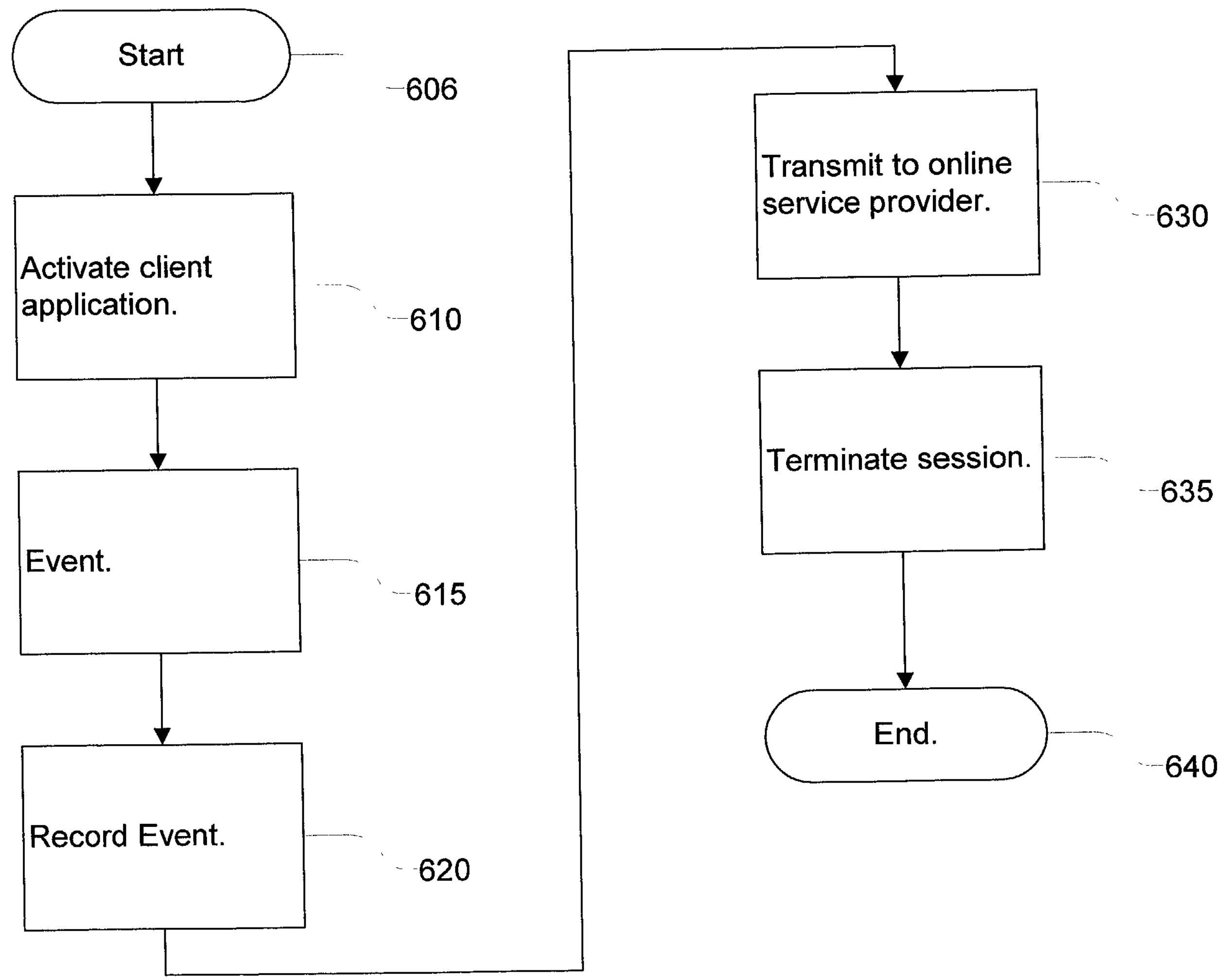

Start
606
Activate client application.
610
Event.
615
Record Event.
620
Transmit to online service provider.
630
Terminate session.
635
End.
640

Figure 6

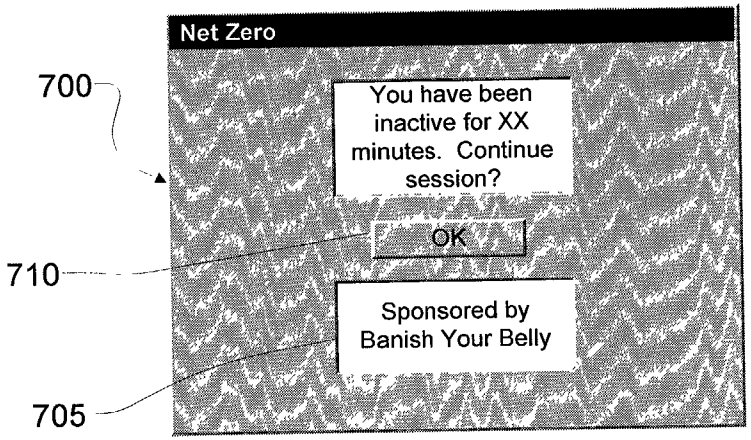


Figure 7

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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☒ Declaration Submitted with Initial Filing OR ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	72189/98118B
First Named Inventor	HAITSUKA, Stacy
COMPLETE IF KNOWN	
Application Number	/
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

INACTIVITY TIMER FOR AN INTERNET CLIENT

(Title of the Invention)

the specification of which

☐ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) ☐ as United States Application Number or PCT International Application Number ☐ and was amended on (MM/DD/YYYY) ☐ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)
~~60/180,479~~	~~10/19/1999~~

☐ Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

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DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)
60/160,479	10/19/1999	

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: ☐ Customer Number [ ] → *Place Customer Number Bar Code Label here*
OR
☒ Registered practitioner(s) name/registration number listed below

Name	Registration Number	Name	Registration Number
Steven C. Sereboff	37,035	Nguyen Nguyen	43,834
David Alexander	28,176	Lawrence M. Sung	38,330
Breton A. Bocchieri	31,739		

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: ☐ Customer Number or Bar Code Label [ ] *OR* ☒ Correspondence address below

Name	Steven C. Sereboff				
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])	Family Name or Surname
Stacy	Haitsuka

Inventor's Signature						Date	7-27-00
Residence: City	~~Los Angeles~~ Oak Park	State	CA	Country	USA	Citizenship	USA
Post Office Address	2555 Townsgate Road						
Post Office Address							
City	Westlake Village	State	CA	ZIP	91361	Country	USA

☒ Additional inventors are being named on the 1 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto

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ADDITIONAL INVENTOR(S)
Supplemental Sheet
Page 1 of 2

Name of Additional Joint Inventor, if any:	☐ A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])	Family Name or Surname						
Ronald	Burr						
Inventor's Signature						**Date**	7-22-00
Residence: City	Agoura	**State**	CA	**Country**	USA	**Citizenship**	USA
Post Office Address	2555 Townsgate Road						
Post Office Address							
City	Westlake Village	**State**	CA	**ZIP**	91361	**Country**	USA

Name of Additional Joint Inventor, if any:	☐ A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])	Family Name or Surname						
Harold	MacKenzie						
Inventor's Signature	Harold MacKenzie					**Date**	7.22.00
Residence: City	Los Angeles	**State**	CA	**Country**	USA	**Citizenship**	USA
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Post Office Address							
City	Westlake Village	**State**	CA	**ZIP**	91361	**Country**	USA

Name of Additional Joint Inventor, if any:	☐ A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])	Family Name or Surname						
Marwan	Zebian						
Inventor's Signature						**Date**	
Residence: City	Agoura	**State**	CA	**Country**	USA	**Citizenship**	
Post Office Address	2555 Townsgate Road						
Post Office Address							
City	Westlake Village	**State**	CA	**ZIP**	91361	**Country**	USA

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ADDITIONAL INVENTOR(S)
Supplemental Sheet
Page 2 of 2

Name of Additional Joint Inventor, if any:	☐ A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])	Family Name or Surname						
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Inventor's Signature	Terry Warren					**Date**	7-27-00
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Post Office Address	2555 Townsgate Road						
Post Office Address							
City	Westlake Village	**State**	CA	**ZIP**	91361	**Country**	USA

Name of Additional Joint Inventor, if any:	☐ A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])	Family Name or Surname						
Shane	Blaser						
Inventor's Signature						**Date**	7-27-00
Residence: City	Camarillo	**State**	CA	**Country**	USA	**Citizenship**	USA
Post Office Address	2555 Townsgate Rd.						
Post Office Address							
City	Westlake Village	**State**	CA	**ZIP**	91361	**Country**	USA

Name of Additional Joint Inventor, if any:	☐ A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])	Family Name or Surname						
Inventor's Signature						**Date**	
Residence: City		**State**		**Country**		**Citizenship**	
Post Office Address							
Post Office Address							
City		**State**		**ZIP**		**Country**	

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